

- Majerus, M.E.N., 1989. *Coccinella magnifica* Redtenbacher – a myrmecophilous ladybird. *British Journal of Entomology & Natural History*, **1**: 1-19.
- , 1994. *Ladybirds (No. 81 New Naturalist Series)*. Harper Collins, London.
- Majerus, M.E.N. & Kearns, P.W.E., 1989. *Ladybirds (No. 10 Naturalist' Handbook Series)*. Richmond Publishing, Slough.
- Majerus, M.E.N., Kearns, P.W.E., Forge, H. & Ireland, H., 1989. Ladybirds as teaching aids: I: Collecting and culturing. *Journal of Biological Education*, **23**: 85-95.
- Majerus, T.M.O., Majerus, M.E.N., Knowles, B., Wheeler, J., Betrand, D., Kuznetsov, V., Ueno, H. & Hurst, G.D.D., in prep. Variation in male killing behaviour in two populations of the ladybird *Harmonia axyridis* (Col.: Coccinellidae).
- Mayr, E., 1963. *Animal Species and Evolution*. Harvard University Press, Cambridge, Massachusetts.
- McDaniel, B. & Morrill, W., 1969. A new species of *Tetrapolipus* from *Hippodamia convergens* from South Dakota (Acarina: Podapolipidae). *Annals of the Entomological Society of America*, **62**: 1456-1458.
- Newman, L.H., 1965. *Hawkmoths of Great Britain and Ireland*. Cassell, London.
- O'Donald, P. & Majerus, M.E.N., 1992. Non-random mating in the two-spot ladybird, *Adalia bipunctata*. III. New evidence of genetic preference. *Heredity*, **61**: 521-526.
- Pontin, A.J., 1960. Some records of predators and parasites adapted to attack aphids attended by ants. *Entomologists Monthly Magazine*, **95**: 154.
- Ransford, M.O. & Majerus, M.E.N., in prep. Male copulatory behaviour and strategies in *Adalia bipunctata* (Coleoptera: Coccinellidae).
- Webberley, K.M., Hurst, G.D.D., Purvis, E.L. & Majerus, M.E.N., in prep. Infestation of coccinellids by the mite *Coccipolipus hippodamiae* (Acarina: Podapolipidae).
- Werren, J.H., Hurst, G.D.D., Zhang, W., Breeuwer, J.A.J., Stouthamer, R. & Majerus, M.E.N., 1994. Rickettsial related male-killing in the ladybird beetle (*Adalia bipunctata*). *Journal of Bacteriology*, **176**: 388-394.
- Zakharov, I.A., Hurst, G.D.D., Chernyshova, N.E. & Majerus, M.E.N., in prep. The maternally inherited male-killing bacterium in the Petersburg population of *Adalia bipunctata* does not belong to the genus *Rickettsia*. *Russian Journal of Genetics*.

Some notable Devon Lepidoptera records

Specimens of *Pediasia contaminella* Hb. (Pyrilidae) were found on the Maer Local Nature Reserve, Exmouth, East Devon on 20.vii.1996, during a moth event that was being run by East Devon District Council with myself operating the moth traps. This species has been recorded from Dawlish Warren in the past but this locality is in a different tetrad in the SY section of the OS map, whereas the old record is in the SX section.

A specimen of *Ancylosis oblitella* Zell. (Pyrilidae) was taken on Dawlish Warren, South Devon on 19.vii.1996 during a routine moth recording session. A second example was later captured on the Axmouth Saltings on 4.viii.1996. I understand that there have been very few records of this species in the past.

A specimen of the Lace Border *Scopula ornata* Scop. (Geometridae) was captured in the Rothamsted trap in Yarner Wood on 20.viii.1984. The

specimen was identified by Adrian Riley and is retained at the Yarner Wood Forest Office. As far as I am aware this was the first specimen of this species to be captured in Devon.

A specimen of the Sword Grass *Xylena exsoleta* L. (Noctuidae) was captured in the Rothamsted trap in Yarner Wood, Dartmoor, Devon on 7.xii.1994. The specimen is retained at the Yarner Wood Forest Office and was subsequently confirmed by myself on 25.vii.1996. As far as I can see, there have been seven other historic sightings of this species in Devon.

A specimen of Haworth's Minor *Celaena haworthii* Curt. was taken by Mr A. Jenkins at Chardstock, Devon on 18.viii.1996; there have been specimens of this species taken on Dartmoor in the past although none of these records have been published. If anyone can help to rectify this lack of records of this species it would prove to be very useful. I would like to thank Mr Jenkins for allowing me to publish this finding; the specimen is in the collection of the author of this note.

Finally, following my earlier note (*Ent. Rec.* **108**: 148), I have now confirmed that the Bloxworth Snout *Hypena obsitalis* Hb. is in fact breeding at Churston, South Devon. Larvae were collected on 2.vii.1996 and were bred through to adult on 18.vii.1996 (male) and 22.vii.1996 (female).

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Observation of a second generation Orange-tip *Anthocharis cardamines* L. (Lep.: Pieridae)

Throughout most of Hertfordshire, the Orange-tip remains one of our most common butterflies. The 1996 season proved no exception, with large numbers being observed on the Environmental Change Network (ECN) common butterfly census conducted on the Rothamsted estate. Males of the Orange-tip are usually on the wing in late April and early May. The earliest siting for Hertfordshire is 13 April 1961 and the latest, 8 July 1902 (Sawford, 1987, *The Butterflies of Hertfordshire*, Castlemead, Ware). Very occasionally, a second generation may emerge in late summer, (Sawford, 1987 *op. cit.*, Thomas and Lewington, 1991, *The Butterflies of Britain and Ireland*, Dorling Kindersley, London). On 5 September 1996, on a sunny afternoon with a light breeze, whilst working in a garden in the village of Redbourn, OS grid reference TL 103122, a male Orange-tip flew in and remained briefly but long enough to observe its characteristic orange wing-tips. This observation is nearly two months later than any previous record for Hertfordshire. – JOHN E. BATER, Department of Entomology and Nematology, IACT Rothamsted, Harpenden, Hertfordshire AL5 2JQ.